

SUPPLEMENTAL AMENDMENT
U. S. Application No. 10/000,123

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (previously presented): A laser light source comprising:

a semiconductor light-emitting device for emitting light having two cleaved end facets;

an external resonator including a wavelength selector which selects a wavelength of said light;

wherein a stripe is formed in said semiconductor light-emitting device so that it is oblique to one end facet, which does not constitute said external resonator, of the two cleaved end facets of said semiconductor light-emitting device; and

said one end facet of said semiconductor light-emitting device has a coating which becomes an antireflection coating with respect to the selected wavelength;

wherein an optical waveguide device comprising an optical waveguide is coupled to said semiconductor light-emitting device;

said wavelength selector has a function of returning the wavelength-selected light to said semiconductor light-emitting device and is disposed on one side of said semiconductor light-emitting device;

said optical waveguide device is disposed on the other side of said semiconductor light-emitting device; and

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said external resonator is constituted by an end facet, on the opposite side from said semiconductor light-emitting device, of said optical waveguide device, and said wavelength selector;

wherein said end facet of said optical waveguide device is perpendicular to said optical waveguide.

2. (previously presented): The laser light source as set forth in claim 1, wherein said wavelength selector comprises two wavelength selectors, disposed on both sides of said semiconductor light-emitting device one by one, and having a function of returning the wavelength-selected light to said semiconductor light-emitting device.

3. (canceled).

4. (previously presented): The laser light source as set forth in claim 1, wherein said stripe has a bent portion and is formed perpendicular to said end facet, on the opposite side from said wavelength selector, of said semiconductor light-emitting device.

5. (canceled).

6. (original): The laser light source as set forth in claim 2, wherein an optical waveguide device is coupled to said semiconductor light-emitting device or wavelength selector.

7. (previously presented): The laser light source as set forth in claim 1, wherein an optical waveguide device is coupled to said semiconductor light-emitting device or wavelength selector.

8. (original): The laser light source as set forth in claim 4, wherein an optical waveguide device is coupled to said semiconductor light-emitting device or wavelength selector.

9. (canceled).

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10. (previously presented): The laser light source as set forth in claim 1, wherein said optical waveguide device has a wavelength converting function.

11. (canceled).

12. (previously presented): The laser light source as set forth in claim 1, wherein the width of the wavelength selected by said wavelength selector is nearly the same as an allowable phase-matching wavelength width for wavelength conversion which is performed by said optical waveguide device having a wavelength converting function.

13. (canceled).

14. (currently amended): The laser light source as set forth in claim ~~11~~10, wherein the width of the wavelength selected by said wavelength selector is nearly the same as an allowable phase-matching wavelength width for wavelength conversion which is performed by said optical waveguide device having a wavelength converting function.

15. (previously presented): The laser light source as set forth in claim 1, wherein said optical waveguide device is disposed in said external resonator.

16. (canceled).

17. (currently amended): The laser light source as set forth in claim ~~11~~10, wherein said optical waveguide device is disposed in said external resonator.

18. (original): The laser light source as set forth in claim 12, wherein said optical waveguide device is disposed in said external resonator.

19. (original): The laser light source as set forth in claim 15, wherein an end facet of said optical waveguide device that constitutes said external resonator is cut perpendicular to a direction where an optical waveguide of said optical waveguide device extends.

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20. (original): The laser light source as set forth in claim 15, wherein an end facet of said optical waveguide device that does not constitute said external resonator is cut oblique to a direction where an optical waveguide of said optical waveguide device extends.

21. (currently amended): The laser light source as set forth in claim ~~5~~1, wherein said optical waveguide is coupled directly to said semiconductor light-emitting device.

22. (canceled).

23. (currently amended): The laser light source as set forth in claim ~~4~~10, wherein said optical waveguide is coupled directly to said semiconductor light-emitting device.

24. (previously presented): The laser light source as set forth in claim 12, wherein said optical waveguide is coupled directly to said semiconductor light-emitting device.

25. (previously presented): The laser light source as set forth in claim 15, wherein said optical waveguide is coupled directly to said semiconductor light-emitting device.

26. (previously presented): The laser light source as set forth in claim 19, wherein said optical waveguide is coupled directly to said semiconductor light-emitting device.

27. (previously presented): The laser light source as set forth in claim 20, wherein said optical waveguide is coupled directly to said semiconductor light-emitting device.

28. (original): The laser light source as set forth in claim 1, wherein said wavelength selector is a waveguide type wavelength selector having a reflection Bragg grating in an optical waveguide portion.

29. (original): The laser light source as set forth in claim 28, wherein said wavelength selector and said semiconductor light-emitting device are coupled directly with each other.

30. (previously presented): A laser light source comprising:

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a semiconductor light-emitting device for emitting light having two cleaved end facets;
an external resonator including a wavelength selector which selects a wavelength of said light;

wherein a stripe is formed in said semiconductor light-emitting device so that it is oblique to one end facet, which does not constitute said external resonator, of the two cleaved end facets of said semiconductor light-emitting device;

said one end facet of said semiconductor light-emitting device has a coating which becomes an antireflection coating with respect to the selected wavelength;

wherein said external resonator is constituted by a mirror, disposed to face one end facet of said semiconductor light-emitting device, and the other end facet of said semiconductor light-emitting device; and

said wavelength selector comprises a narrow-band pass filter disposed between said mirror and said semiconductor light-emitting device.

31. (previously presented): A laser light source comprising:

a semiconductor light-emitting device for emitting light having two cleaved end facets;
an external resonator including a wavelength selector which selects a wavelength of said light;

wherein a stripe is formed in said semiconductor light-emitting device so that it is oblique to one end facet, which does not constitute said external resonator, of the two cleaved end facets of said semiconductor light-emitting device;

said one end facet of said semiconductor light-emitting device has a coating which becomes an antireflection coating with respect to the selected wavelength; and

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a drive circuit that drives said semiconductor light-emitting device with high-frequency superposition.

32. (original): The laser light source as set forth in claim 30, further comprising a drive circuit that drives said semiconductor light-emitting device with high-frequency superposition.

33. (previously presented): The laser light source as set forth in claim 1, wherein a longitudinal mode width of said external resonator is less than the width of the wavelength selected by said wavelength selector; and said laser light source is operated in a multi-longitudinal mode which is within the width of said selected wavelength by high-frequency superposition.

34. (previously presented): The laser light source as set forth in claim 30, wherein a longitudinal mode width of said external resonator is less than the width of the wavelength selected by said wavelength selector; and said laser light source is operated in a multi-longitudinal mode which is within the width of said selected wavelength by high-frequency superposition.

35. (original): The laser light source as set forth in claim 31, wherein a longitudinal mode width of said external resonator is less than the width of the wavelength selected by said wavelength selector; and said laser light source is operated in a multi-longitudinal mode which is within the width of said selected wavelength by said high-frequency superposition.

36. (previously presented): The laser light source as set forth in any one of the preceding claims, further comprising temperature control means for maintaining the devices, which constitute said external resonator, at a predetermined temperature.